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10/664,673

09/18/2003

Michael Borella

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EXAMINER

LIN, KENNY S

ART UNIT

PAPER NUMBER

2152

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/664,673	<b>Applicant(s)</b> BORELLA ET AL.	
	<b>Examiner</b> Kenny Lin	<b>Art Unit</b> 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/19/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-41 are presented for examination.
2. The IDS filed on 7/19/2004 is considered.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-15 and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following term lack proper antecedence basis:

- i. Claim 11, line 2 – a first node (is this the “a node” introduced in claim 1?)
- ii. Claim 11, line 3 – a node (is this the “a node” introduced in claim 1?)
- iii. Claim 12, line 4 – a node (is this the “a node” introduced in claim 1?)
- iv. Claim 13, line 4 – a node (is this the “a node” introduced in claim 1?)
- v. Claim 14, line 4 – a node (is this the “a node” introduced in claim 1?)
- vi. Claim 15, line 4 – a node (is this the “a node” introduced in claim 1?)

- b. The term "substantially" in claim 21 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the

invention. Although the specification shows support for a range of candidate periods of time such as 1.0 seconds, 5.0 seconds...etc., the specification does not disclosed these fixed periods of times to be “substantially fixed”.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 10-11, 13, 16-17, 21-30 and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al (Takahashi), US 2004/0064520.

7. As per claim 1, Takahashi taught the claimed invention including a method to facilitate conducting an Internet protocol session comprising:

- a. Retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a node (pp. 0024, 0026, 0028, 0031-0032, 0036, 0038);
- b. Using that at least one temporary Internet protocol session parameter to facilitate initiation of an Internet protocol session with the node (pp. 0031, 0036).

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8. As per claim 16, Takahashi taught the claimed invention including a method to facilitate conducting an Internet protocol session comprising:

- a. Conducting a first Internet protocol session with a node using at least one temporary session parameter (pp. 0021, 0033);
- b. Upon concluding the first Internet protocol session, storing information that corresponds to the at least one temporary Internet protocol session parameter (pp. 0024: preserving the execution state of the operating system; pp. 0026, 0028: storing the execution state of the operation system in memory; pp. 0038);
- c. When the node seeks to initiate a second Internet protocol session within a predetermined period of time as corresponding to concluding the first Internet protocol session (pp. 0021-0022, 0026, 0030, 0040):
  - i. Retrieving from memory the at least one temporary Internet protocol session parameter (pp. 0026, 0028, 0031-0032, 0036);
  - ii. Using that at least one temporary Internet protocol session parameter to facilitate the second Internet protocol session (pp. 0031, 0036).

9. As per claim 30, Takahashi taught the claimed invention including a Internet protocol session facilitation apparatus comprising:

- a. An Internet protocol session facilitator (pp. 0021, 0033: control device);
- b. A memory having at least one previous temporary Internet protocol session parameter as corresponds to a recently concluded session temporarily stored for

no more than a limited time wherein as corresponds to a concluded Internet protocol session (pp. 0024, 0026, 0028, 0031-0032, 0036).

10. As per claim 2, Takahashi taught the invention in claim 1. Takahashi further taught retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a node comprises retrieving from memory a temporarily assigned Internet protocol address as was recently previously assigned to the node (pp. 0026, 0028, 0031-0032, 0036).

11. As per claim 3, Takahashi taught the invention in claim 2. Takahashi further taught retrieving from memory a temporarily assigned Internet protocol address as was recently previously assigned to the node comprises retrieving from memory a temporarily assigned Internet protocol address as was recently previously assigned to the node and not then yet subsequently returned to a pool of available temporary Internet protocol addresses (0026, 0028, 0031-0032, 0036).

12. As per claim 10, Takahashi taught the invention in claim 1. Takahashi further taught retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a node comprises only retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a node when the node seeks to facilitate the Internet protocol session within a predetermined period of time following termination of a previous Internet protocol session (pp. 0021-0022, 0026, 0030).

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13. As per claim 11, Takahashi taught the invention as claimed in claim 1. Takahashi further taught retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a first node comprises retrieving from memory at least one temporary Internet protocol session parameter as corresponds to a node when a second node seeks to communicate with the first node within a predetermined period of time following termination of a previous Internet protocol session (pp. 0021-0022, 0026, 0030, 0040-0043).

14. As per claim 13, Takahashi taught the invention as claimed in claim 1. Takahashi further taught retrieving from memory at a remote access server at least one temporary Internet protocol session parameter as corresponds to a node (DHCP server).

15. As per claim 17, Takahashi taught the invention in claim 16. Takahashi further taught storing information that corresponds to the at least one temporary Internet protocol session parameter comprises storing information that corresponds to a temporary Internet protocol address as was assigned to the node for the first Internet protocol session (p. 0024, 0026, 0028).

16. As per claim 21, Takahashi taught the invention in claim 16. Takahashi further taught the predetermined period of time comprises a substantially fixed predetermined period of time (pp. 0021, 0040, 0043).

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17. As per claim 22, Takahashi taught the invention in claim 16. Takahashi further taught the substantially fixed predetermined period of time is selected from within a range of candidate periods of time (pp. 0030).

18. As per claim 23, Takahashi taught the invention in claim 16. Takahashi further taught the predetermined period of time comprises a dynamically determined period of time (pp. 0030, 0040).

19. As per claim 24, Takahashi taught the invention in claim 23. Takahashi further taught determining the dynamically determined period of time as a function, at least in part, of a time when the first Internet protocol session concludes (pp. 0030, 0040-0043).

20. As per claims 25-26, Takahashi taught the invention in claim 24. Takahashi further taught determining the dynamically determined period of time as a function, at least in part, of a time of day when the first Internet protocol session concludes (pp. 0030, 0040-0043).

21. As per claim 27, Takahashi taught the invention in claim 23. Takahashi further taught determining the dynamically determined period of time as a function, at least in part, of a prioritization as pertains to the node (pp. 0030, 0040-0043: within the period of time, the node has the priority to reuse the IP).



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22. As per claim 28, Takahashi taught the invention in claim 23. Takahashi further taught determining the dynamically determined period of time as a function, at least in part, of available Internet protocol session resources (pp. 0030, 0040-0043).

23. As per claim 29, Takahashi taught the invention in claim 28. Takahashi further taught determining the dynamically determined period of time as a function, at least in part, of available Internet protocol session resources comprises determining the dynamically determined period of time as a function, at least in part, of available temporary Internet protocol addresses (pp. 0030, 0040-0043).

24. As per claim 36, Takahashi taught the invention in claim 30. Takahashi further taught the Internet protocol session facilitator comprises hang-time means for using the at least one previous temporary Internet protocol session parameter to facilitate a new Internet protocol session for a common node (pp. 0040, 0043).

25. As per claim 37, Takahashi taught the invention in claim 36. Takahashi further taught the hang-time means only uses at least one previous temporary Internet protocol session parameter to facilitate a new Internet protocol session when the common node seeks to initiate the new Internet protocol session within a predetermined period of time of when a previous Internet protocol session concluded (pp. 0040, 0043).

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26. As per claim 38, Takahashi taught the invention in claim 30. Takahashi further taught the at least one previous temporary Internet protocol session parameter comprises a temporary Internet protocol address (pp. 0036).

27. As per claim 39, Takahashi taught the invention in claim 38. Takahashi further taught the temporary Internet protocol address comprises a simple Internet protocol address (pp. 0036).

***Claim Rejections - 35 USC § 103***

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 4-9, 12, 14-15, 18-20 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (Takahashi), US 2004/0064520.

30. As per claims 4-6, Takahashi taught the invention substantially as claimed in claim 1. Takahashi did not specifically teach retrieving from memory at least one point-to-point protocol session parameter, at least one domain name system session parameter or at least one Internet protocol session compression parameter. However, Takahashi taught to preserve the execution state of the operation system in memory and use the stored execution state to recover the device back to the operation state (pp. 0024-0026, 0028, 0030-0031, 0038). It would have been obvious

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to one of ordinary skill in the art to recognized that the process of preserving the execution state would include storing all configuration and parameters, including all session parameters, in order for the device to fully recover to its previous operation state. It would have been obvious to one of ordinary skill in the art at the time of the invention to store in memory all session parameters including PPP, domain name system and IP session compression parameters during a preserving process in order to retrieve these information to fully recover the device back to its operating state in a later time.

31. As per claims 7-8, Takahashi taught the invention substantially as claimed in claim 4. Takahashi did not specifically teach retrieving from memory at least one point-to-point protocol session parameter as corresponds to a recent point-to-point protocol session as was conducted with the node; retrieving from memory a plurality of point-to-point protocol session parameters. However, Takahashi taught to preserve the execution state of the operation system in memory and use the stored execution state to recover the device back to the operation state (pp. 0024-0026, 0028, 0030-0031, 0038). It would have been obvious to one of ordinary skill in the art to recognized that the process of preserving the execution state would include storing all configuration and parameters, including all session parameters, in order for the device to fully recover to its previous operation state (e.g. recent operation state). It would have been obvious to one of ordinary skill in the art at the time of the invention to store in memory all session parameters including a plurality of PPP session parameters during a preserving process in order to retrieve these information to fully recover the device back to its operating state in a later time.

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32. As per claim 9, Takahashi taught the invention substantially as claimed in claim 4.

Takahashi did not specifically teach using that at least one temporary Internet protocol session parameter to facilitate initiation of an Internet protocol session with the node comprises using the at least one point-to-point protocol session parameter to negotiate a new point-to-point protocol session with the node. However, as admitted by the applicant in the specification of the application, it would have been obvious and clear to those skilled in the art at the time the invention was made to facilitate initiation of an IP session with the node using the at least one PPP session parameter to negotiate a new PPP session with the node (see page 7, paragraph 0030 of the application).

33. As per claims 12 and 14-15, Takahashi taught the invention substantially as claimed in claim 1. Takahashi did not specifically teach retrieving from memory at a packet data service node/a home agent/a gateway general packet radio service support node at least one temporary Internet protocol session parameter as corresponds to a node. However, the concept and advantage of storing and retrieving contents at a remote memory is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Takahashi's teaching with various types of remote devices, servers and nodes to support content storing and retrieving, including parameters, for the session establishing nodes.

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34. As per claims 18-20, Takahashi taught the invention substantially as claimed in claim 16. Takahashi did not specifically teach storing information that corresponds to point-to-point protocol session parameters as were negotiated by the node for the first Internet protocol session, at least one domain name system session parameter or at least one Internet protocol session compression parameter. However, Takahashi taught to preserve the execution state of the operation system in memory and use the stored execution state to recover the device back to the operation state (pp. 0024-0026, 0028, 0030-0031, 0038). It would have been obvious to one of ordinary skill in the art to recognize that the process of preserving the execution state would include storing all configuration and parameters, including all session parameters, in order for the device to fully recover to its previous operation state. It would have been obvious to one of ordinary skill in the art at the time of the invention to store in memory all session parameters including PPP, domain name system and IP session compression parameters during a preserving process in order to retrieve these information to fully recover the device back to its operating state in a later time.

35. As per claims 31-35, Takahashi did not specifically teach that the Internet protocol session facilitator comprises a packet data serving node/a home agent/a gateway general packet radio service support node/an AAA node. However, network devices such as packet serving node, home agent, gateway general packet radio service support node and AAA node and their advantages are well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Takahashi's teaching

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with various types of remote devices, servers and nodes to include IP session facilitating functions to establish sessions with requesting nodes.

36. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (Takahashi), US 2004/0064520, in view of Bertrand et al (Bertrand), US 6,876,640.

37. As per claims 40-41, Takahashi taught the invention substantially as claimed in claim 30. Takahashi further taught the previous temporary Internet protocol session parameter to comprise a temporary Internet protocol address (pp. 0026, 0028, 0031-0032, 0036). Takahashi did not specifically teach that the at least one previous temporary Internet protocol session parameter comprises at least one point-to-point protocol negotiated session parameter. Bertrand taught to reuse previous PPP protocol for negotiating new session (col.2, lines 62-67, col.3, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Bertrand and reuse the previous temporary Internet protocol session parameter including previous PPP protocol to negotiate a new session.

### *Conclusion*

38. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

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39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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August 16, 2007

